

AMENDMENTS TO THE CLAIMS

Prior to the present communication, claims 6-11 were pending in the subject application. All claims currently pending and under consideration in the present application are shown below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-5. (Canceled)

6. (Currently Amended) A power supply system for providing reliable electrical power to a telecommunications facility, said facility containing telecommunications equipment, said system comprising:

an AC power source;

a plurality of individual rectifier/super capacitor devices, each device including a rectifier and a super capacitor ~~housed~~ packaged together in a housing, wherein the rectifier is operable to convert said AC electrical power to DC electrical power adaptable to power said telecommunication equipment;

a DC power source including one or more proton exchange membrane fuel cell modules receiving hydrogen fuel from storage tanks, said DC power source selectively powering said telecommunication equipment based on an interruption of AC power being provided by the AC power source;

wherein each of said individual rectifier/super capacitor devices includes a first, a second, and a third connection point, the first connection point internally couples the rectifier to the AC power source, the second connection point

internally couples the rectifier to a first side of said super capacitor and to the telecommunication equipment for providing DC power thereto, and the third connection point internally couples a second side of said super capacitor to ground;

wherein said AC power source ~~is~~ comprises at least one microturbine generator operable to produce AC electrical power and adapted to be powered by a fuel;

a first switching mechanism operable either to couple said at least one microturbine generator to said first connection point or to couple a commercial electric utility to said first connection point; ~~and~~

a sensing/control mechanism operable to determine when inadequate flow of the fuel is realized by said at least one microturbine generator, and in response, direct the operation of the first switching mechanism to selectively couple said commercial electric utility to said first connection point, wherein the super capacitor is further configured as a power source to provide DC power to the telecommunication equipment when the first switching mechanism selectively couples said first connection point from said AC power source to said commercial electric utility, such that the DC power provided to the telecommunication equipment is uninterrupted; and

a modular container for enclosing the plurality of individual rectifier/super capacitor devices pre-wired in parallel, the AC source, the DC source, and the first switching mechanism preassembled with sensing/control mechanism, wherein the modular container is capable of being transported to the

telecommunications facility and coupled with the telecommunications equipment contained therein.

7. (Currently Amended) The system of claim 6 wherein said fuel for said at least one microturbine generator is natural gas, the system further comprising a first valve to couple a source of the natural gas to the at least one microturbine generator in fluid communication.

8. (Original) The system of claim 7 wherein said natural gas is supplied by a commercial utility.

9. (Currently Amended) The system of claim 6 wherein said fuel for said at least one microturbine generator is propane, the system further comprising a second valve to couple a source of the propane to the at least one microturbine generator in fluid communication, wherein the sensing/control mechanism is operable to determine when inadequate flow of the natural gas is realized by said at least one microturbine generator, and in response, direct the operation of the first valve to prevent flow from the source of the natural gas to the at least one microturbine generator and concurrently direct the operation of the second valve to allow flow from the source of the propane to the at least one microturbine generator.

10. (Currently Amended) The system of claim 9 wherein said source of propane and the storage tanks of the hydrogen fuel are is—stored on a site of the telecommunications facility, and wherein the source of propane, the source of natural gas, and the storage tanks are coupled to the modular container upon being transported to the telecommunications facility.

11. (Currently Amended) The system of claim 6 wherein said AC power source ~~is a~~ further comprises at least one commercial electric utility.

12-20. (Canceled)

21. (New) The system of claim 6 wherein the sensing/control mechanism is configured to initially activate and selectively couple the one or more proton exchange membrane fuel cell modules to the telecommunication equipment, thereby acting as a primary source of power, and to temporarily, selectively couple the at least one microturbine generator to the telecommunication equipment in concurrence with the activation of the one or more proton exchange membrane fuel cell modules until an output thereof rises to a predefined level.

22. (New) The system of claim 11 wherein the sensing/control mechanism is configured to initially selectively couple the at least one microturbine generator to the telecommunication equipment, via the plurality of individual rectifier/super capacitor devices pre-wired in parallel, to secondly selectively couple the commercial electric utility to the telecommunication equipment, via the plurality of individual rectifier/super capacitor devices pre-wired in parallel, upon sensing a disruption from the at least one microturbine generator, and to thirdly selectively couple the one or more proton exchange membrane fuel cell modules to the telecommunication equipment directly upon sensing a disruption at the commercial electric utility.